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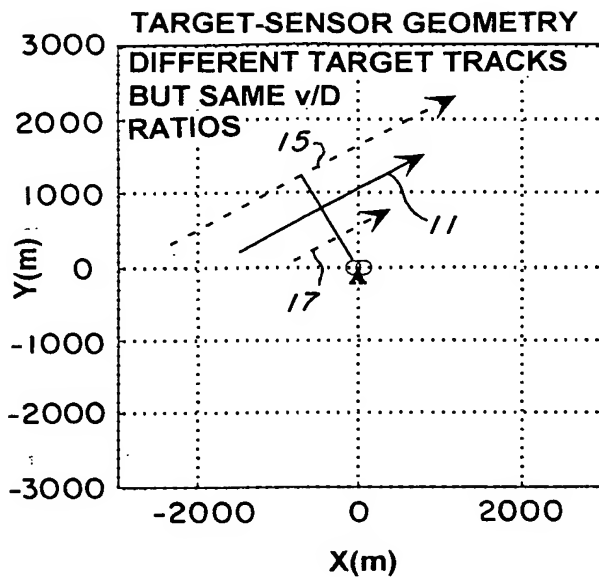
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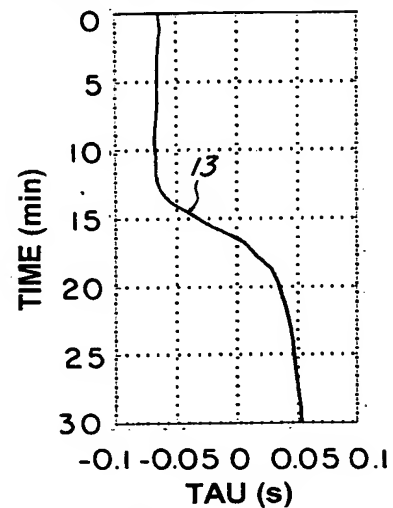
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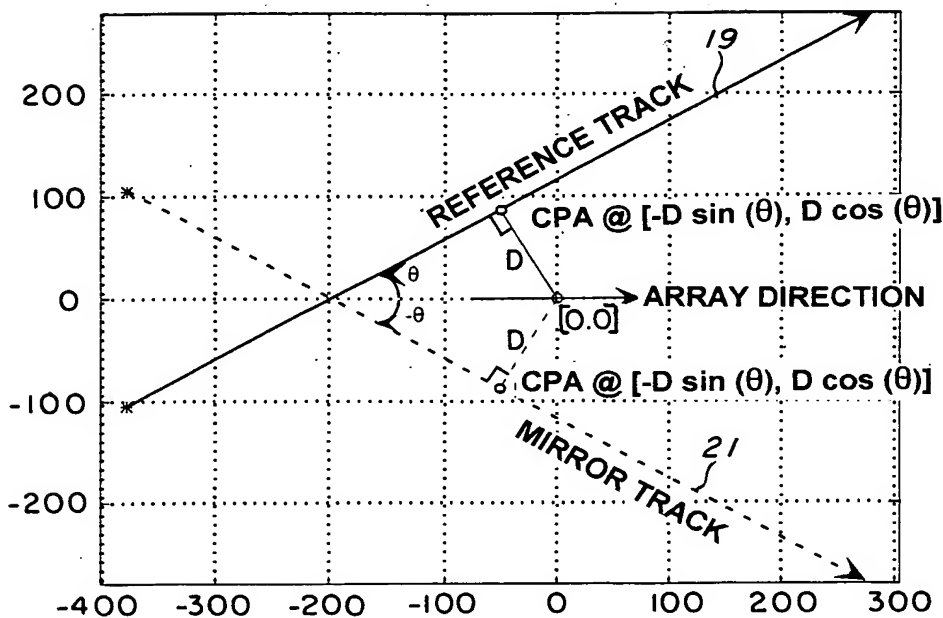


**FIG. 1a**

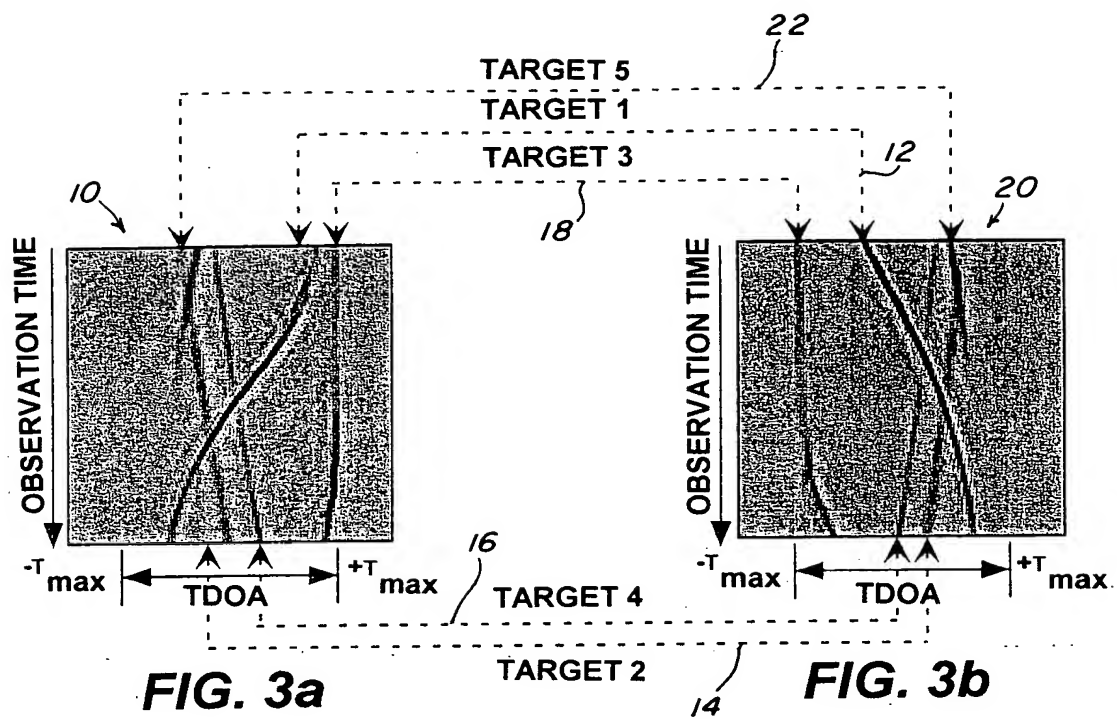
**DELAY CURVE OBTAINED BY ARRAY A**



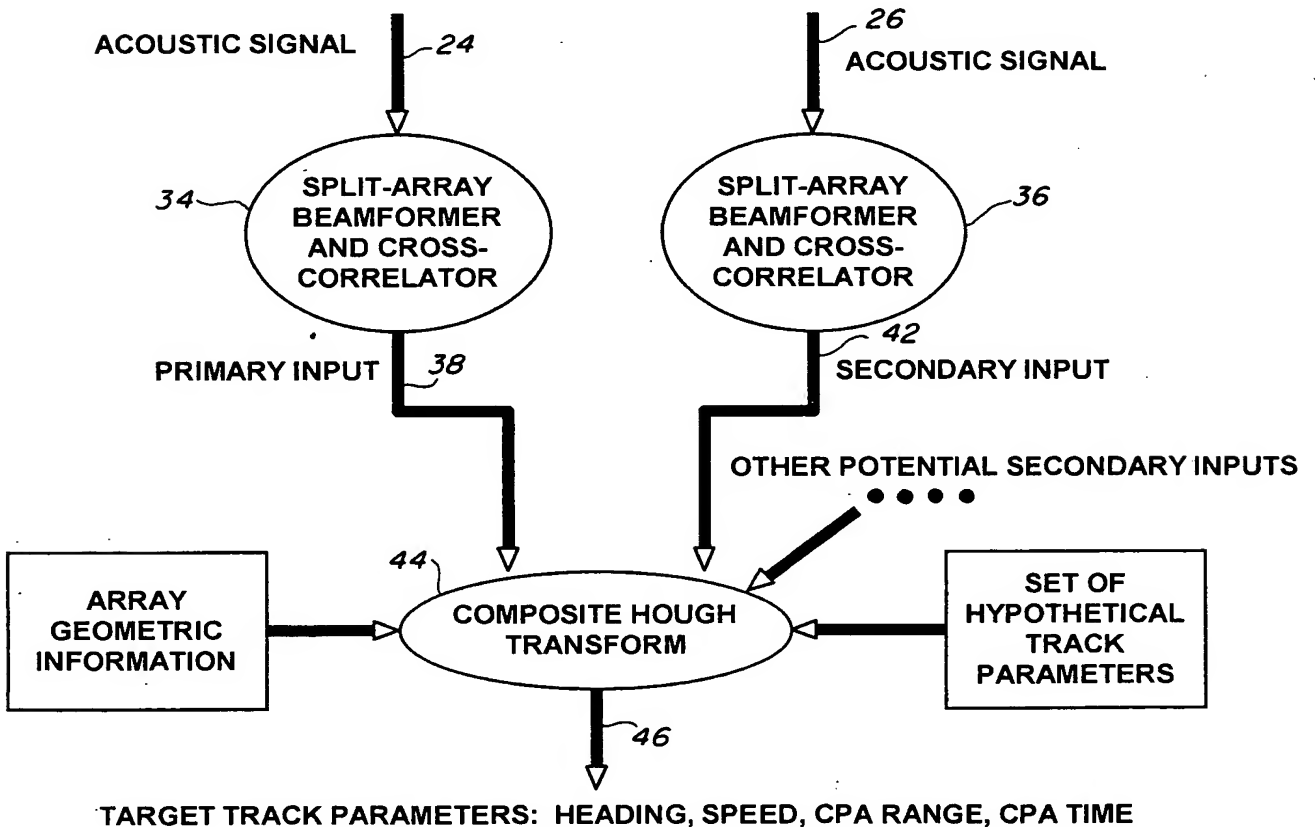
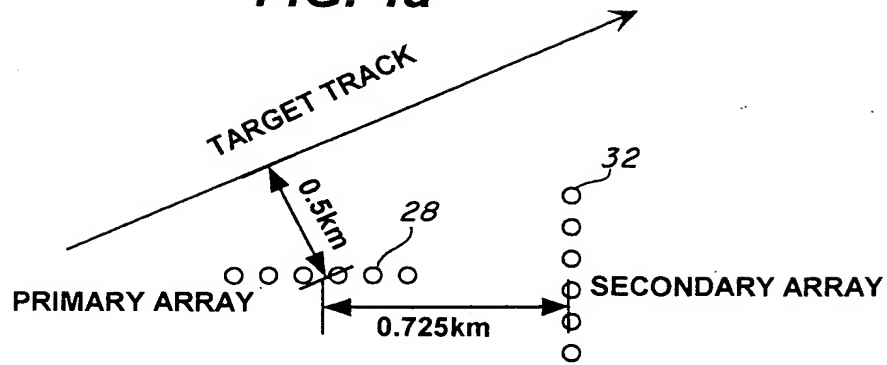
**FIG. 1b**



**FIG. 2**

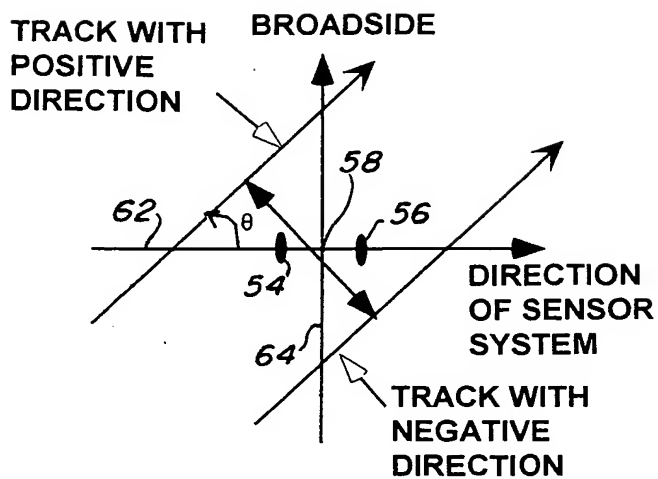


**FIG. 4a**

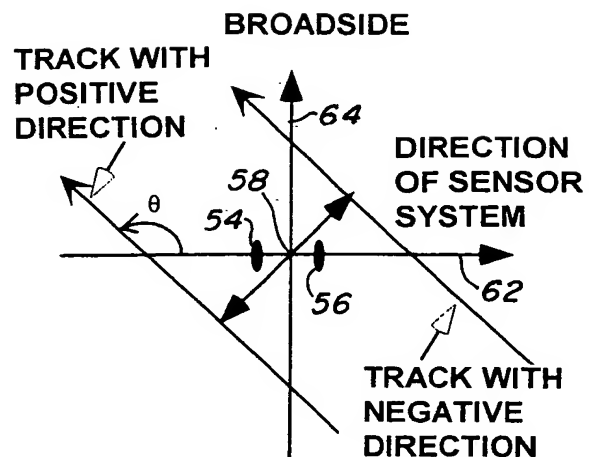


**FIG. 4b**

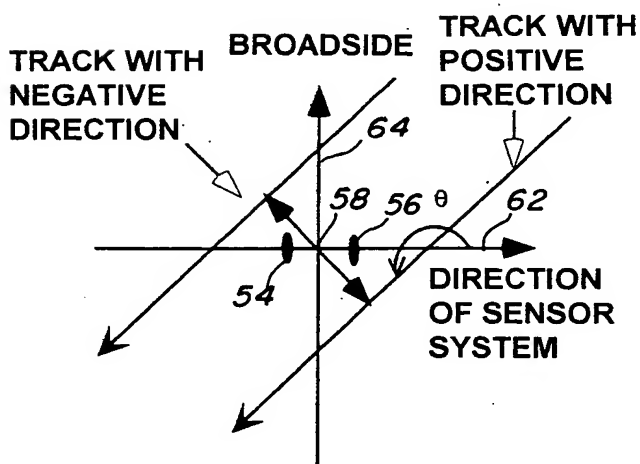




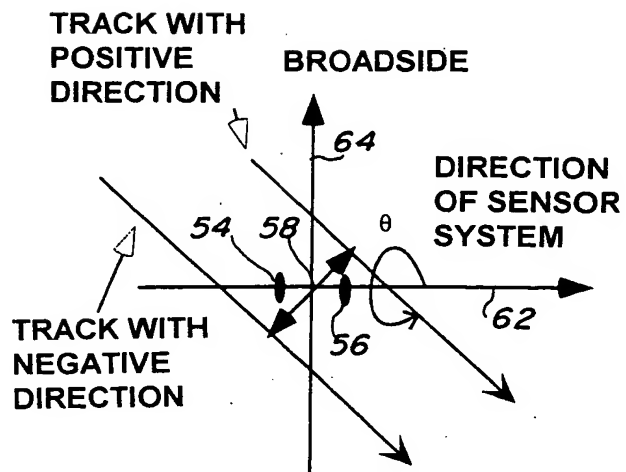
$0^\circ < \theta < 90^\circ$   
**FIG. 6a**



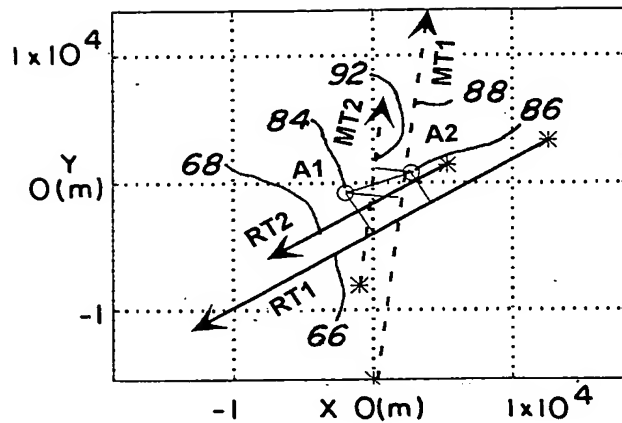
$90^\circ < \theta < 180^\circ$   
**FIG. 6b**



$180^\circ < \theta < 270^\circ$   
**FIG. 6c**

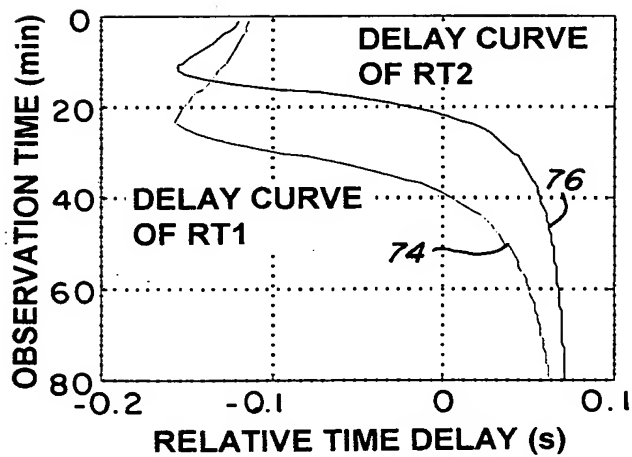
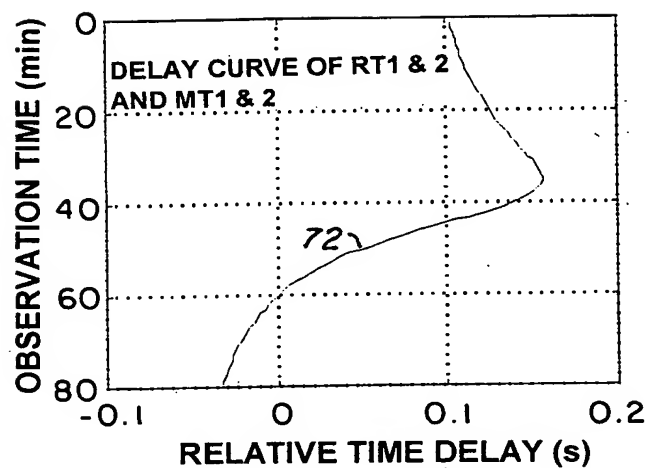


$270^\circ < \theta < 360^\circ$   
**FIG. 6d**



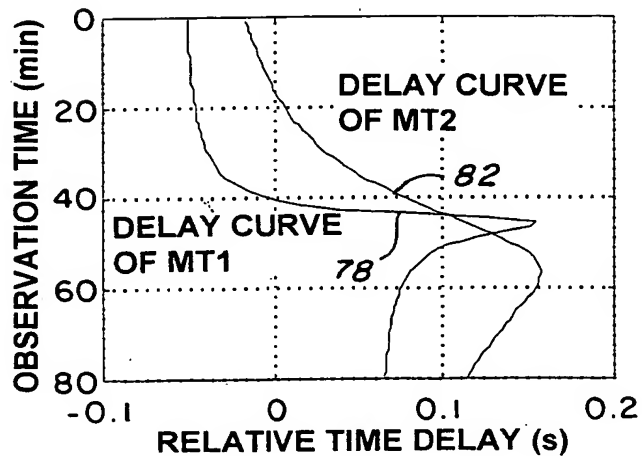
**FIG. 7a**

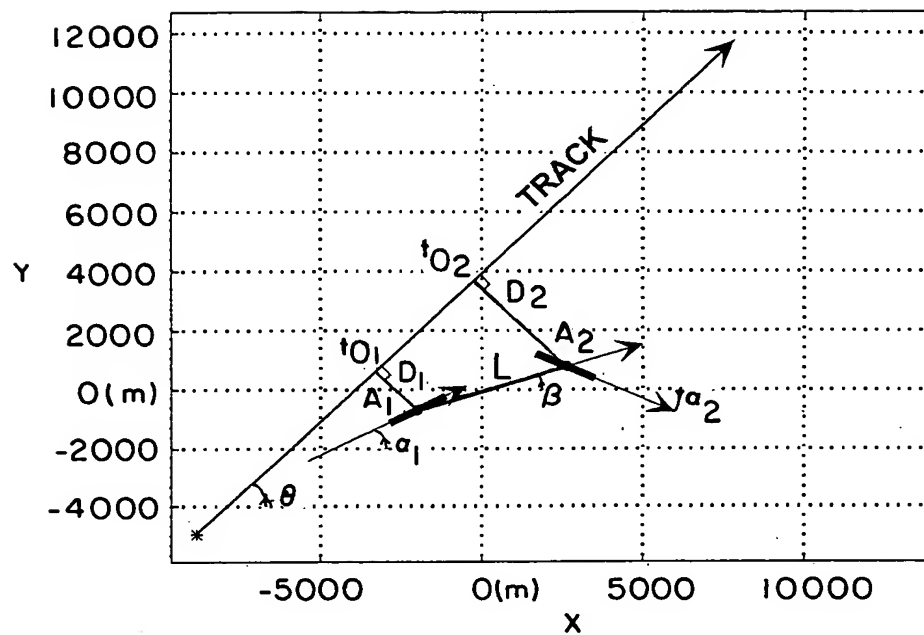
**FIG. 7b**



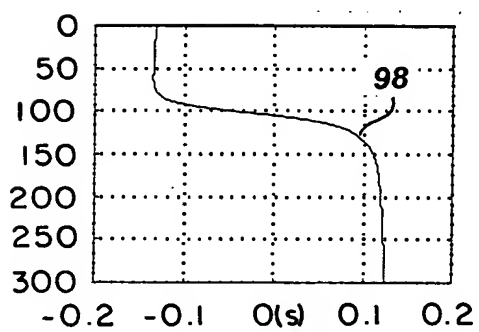
**FIG. 7c**

**FIG. 7d**

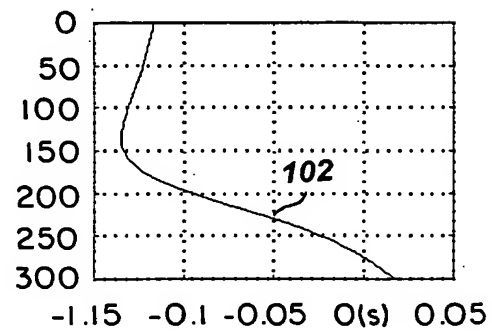




**FIG. 8**

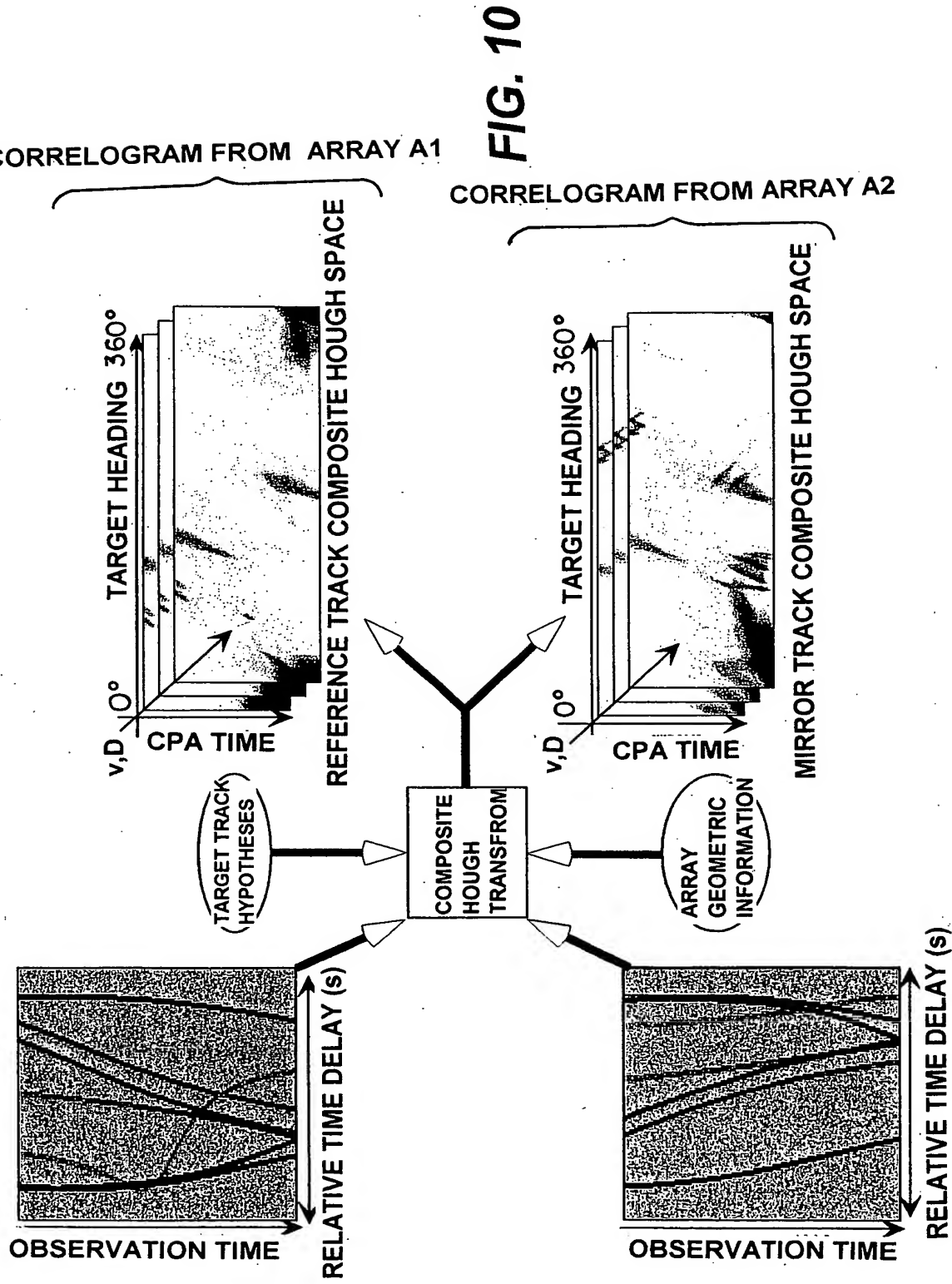


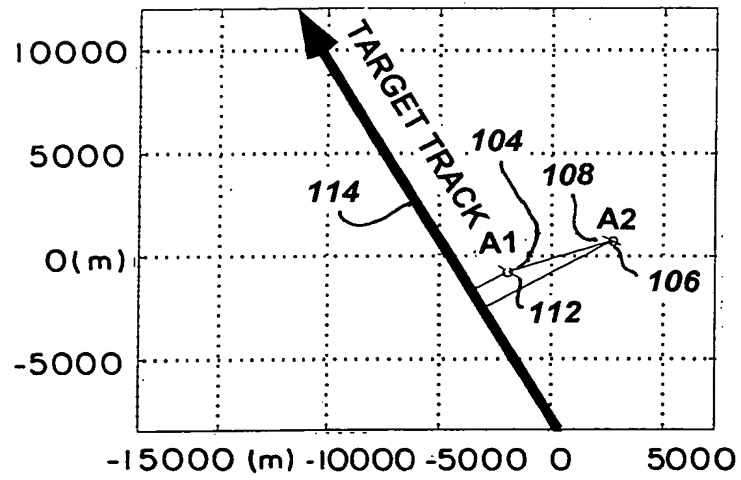
**FIG. 9a**



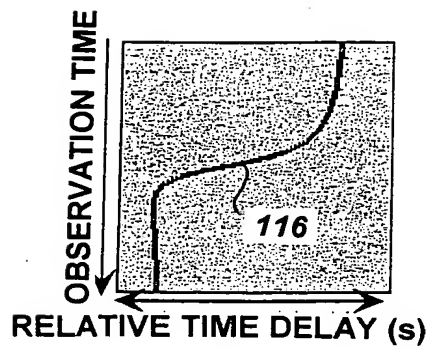
**FIG. 9b**



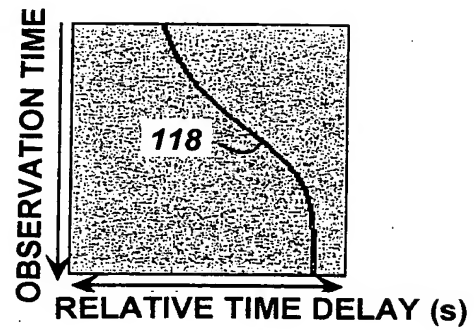




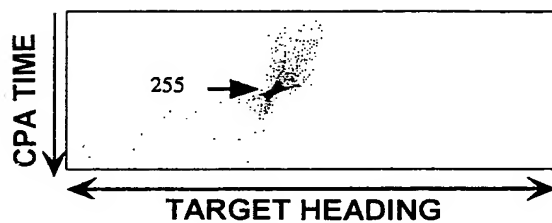
**FIG. 11a**



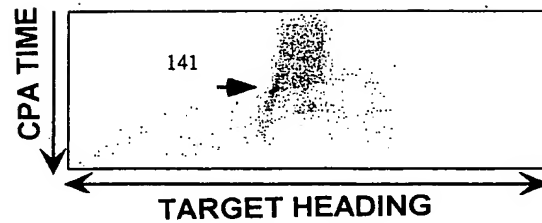
**FIG. 11b**



**FIG. 11c**

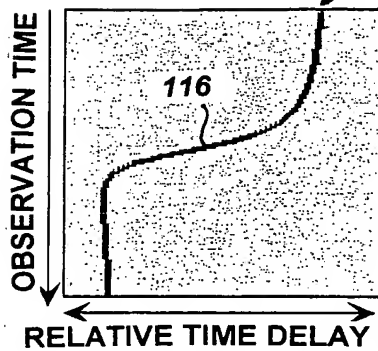
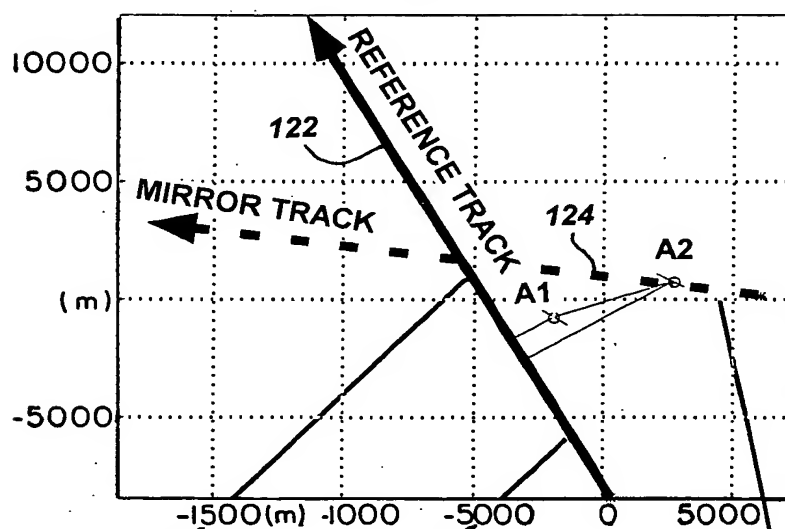


**FIG. 12a**

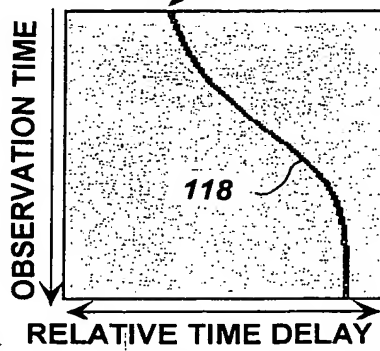


**FIG. 12b**

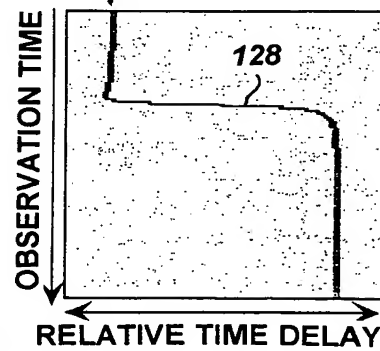
**FIG. 13a**



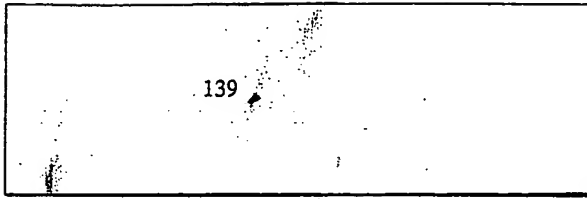
**FIG. 13b**



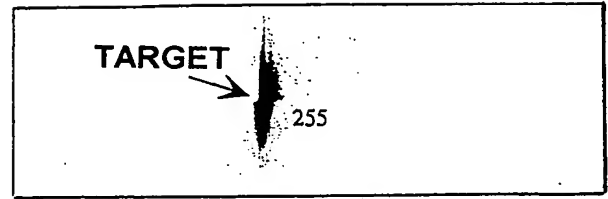
**FIG. 13c**



**FIG. 13d**

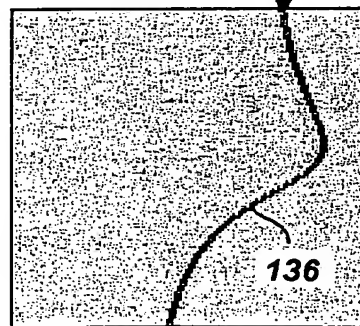
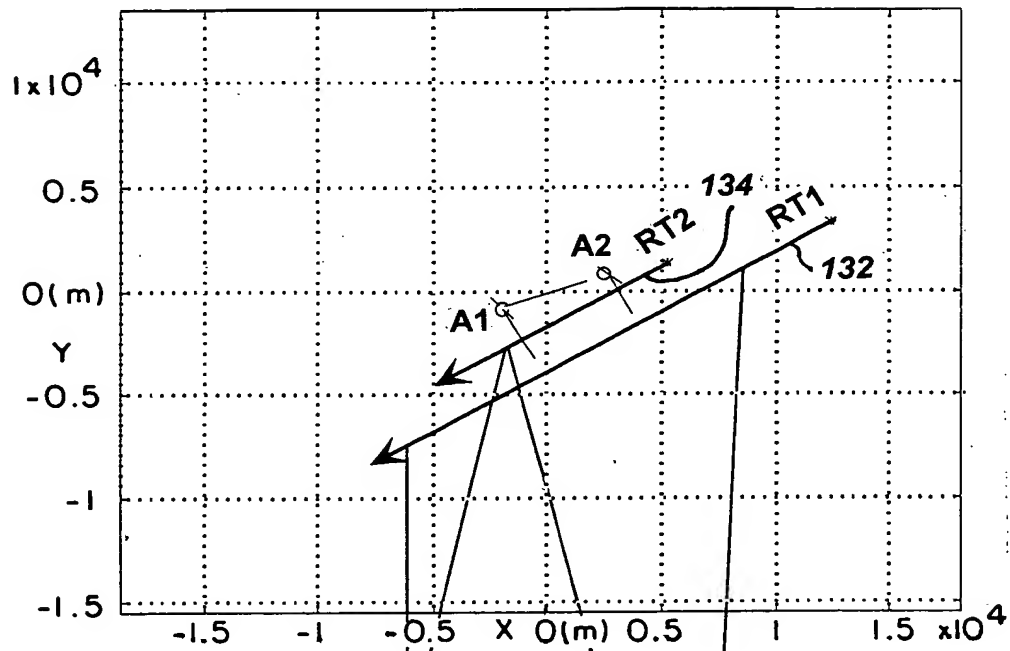


**FIG. 14a**

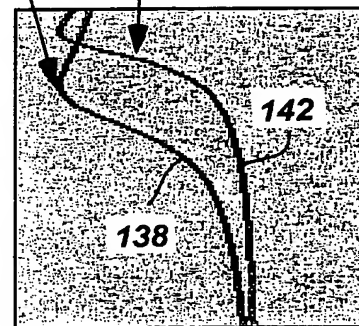


**FIG. 14b**

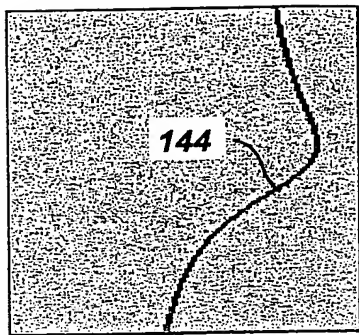
**FIG. 15a**



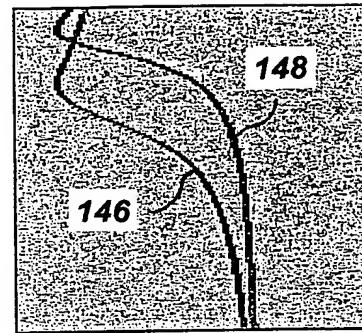
**FIG. 15b**



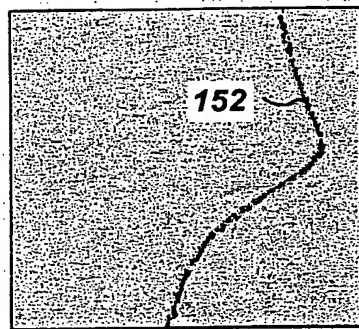
**FIG. 15c**



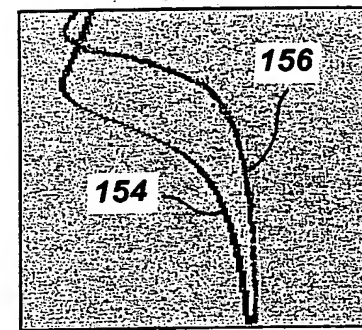
**FIG. 16a**



**FIG. 16b**



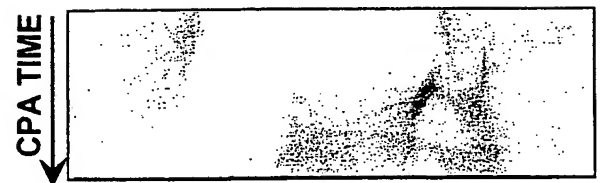
**FIG. 16c**



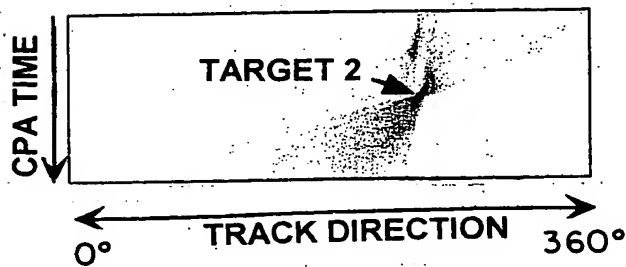
**FIG. 16d**



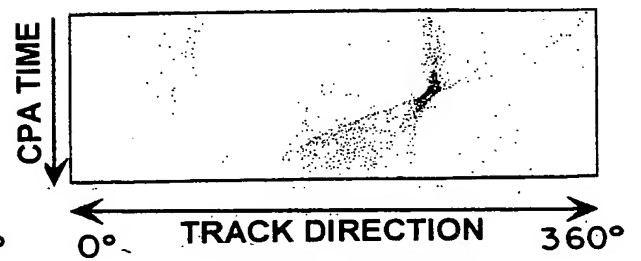
**FIG. 17a**



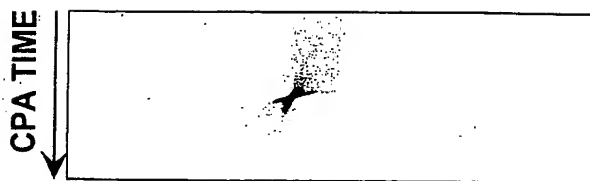
**FIG. 17b**



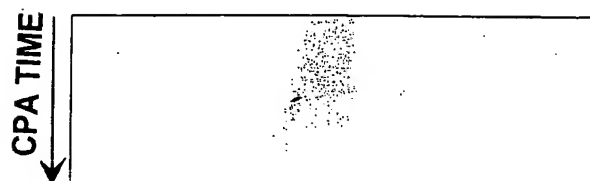
**FIG. 17c**



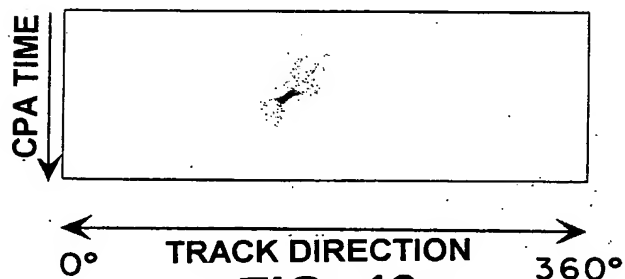
**FIG. 17d**



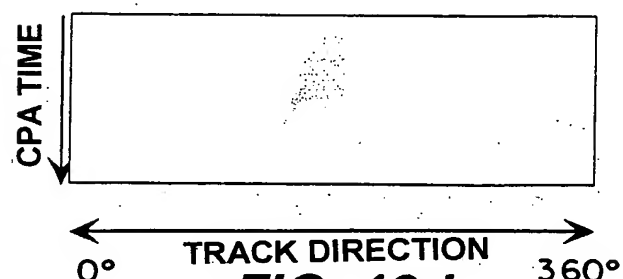
**FIG. 18a**



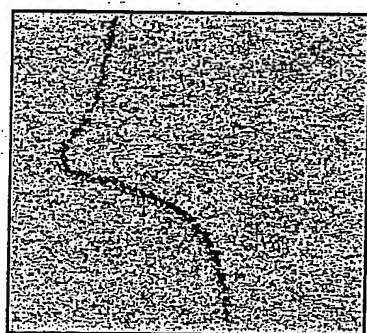
**FIG. 18b**



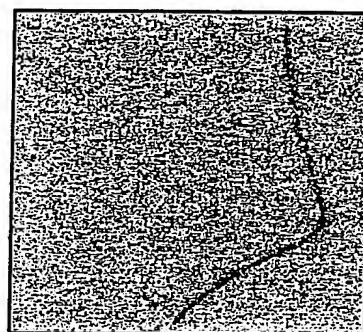
**FIG. 18c**



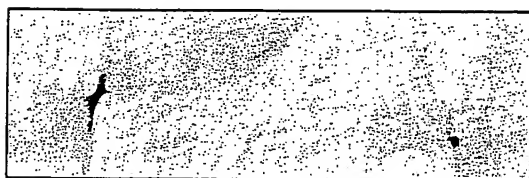
**FIG. 18d**



**FIG. 19a**



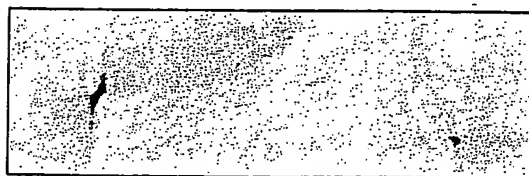
**FIG. 19b**



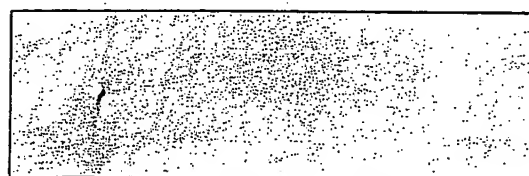
**FIG. 19c**



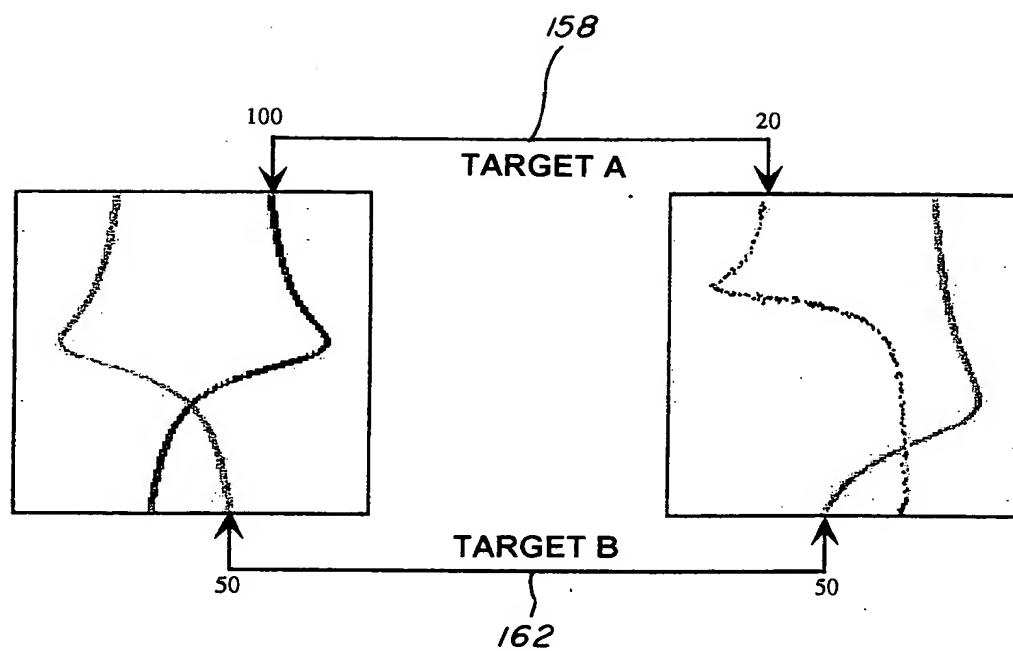
**FIG. 19d**



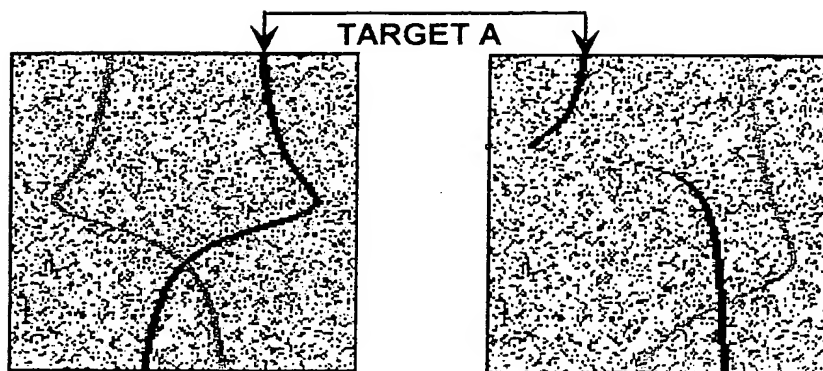
**FIG. 19e**



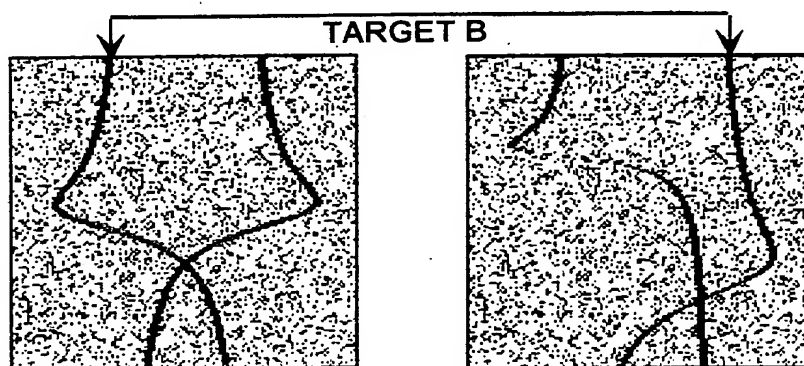
**FIG. 19f**



**FIG. 20**



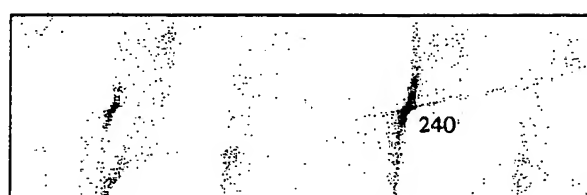
**FIG. 21a**



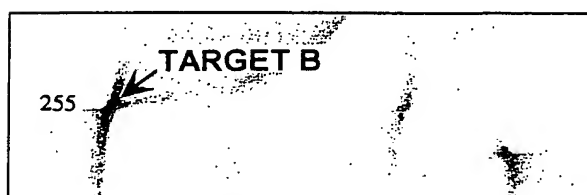
**FIG. 21b**



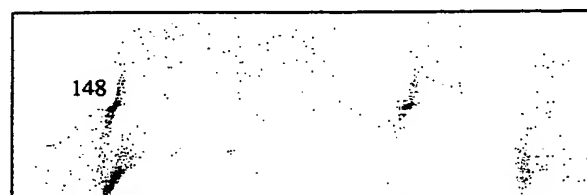
**FIG. 21c**



**FIG. 21d**

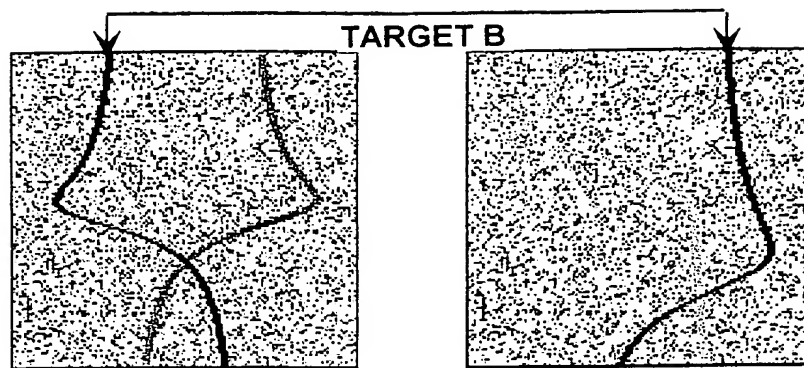


**FIG. 21e**

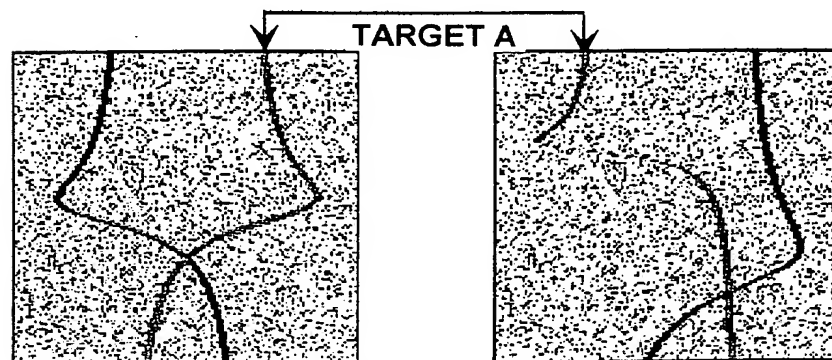


**FIG. 21f**

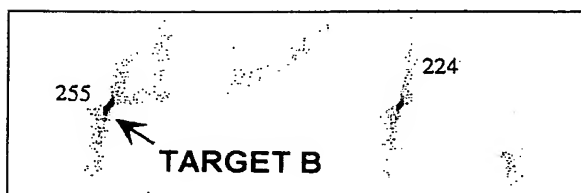




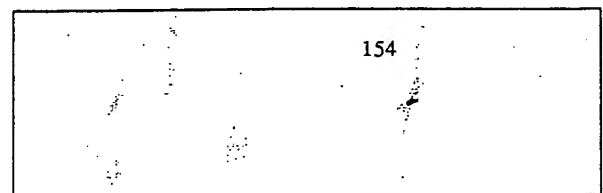
**FIG. 22a**



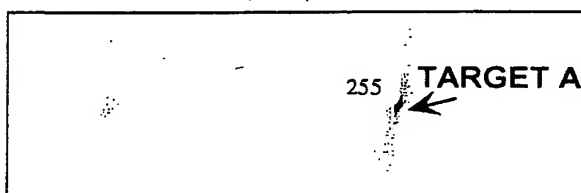
**FIG. 22b**



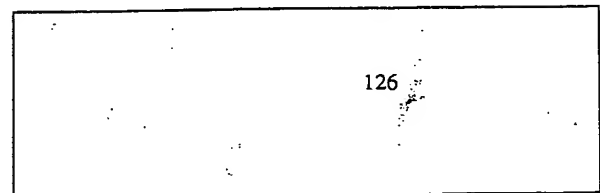
**FIG. 22c**



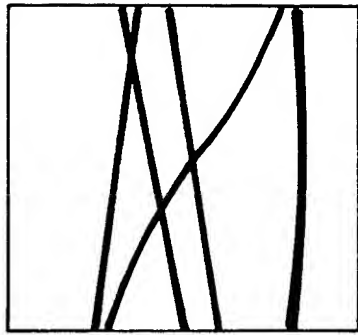
**FIG. 22d**



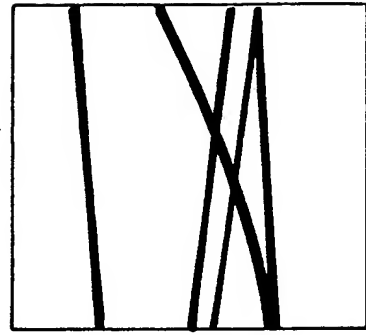
**FIG. 22e**



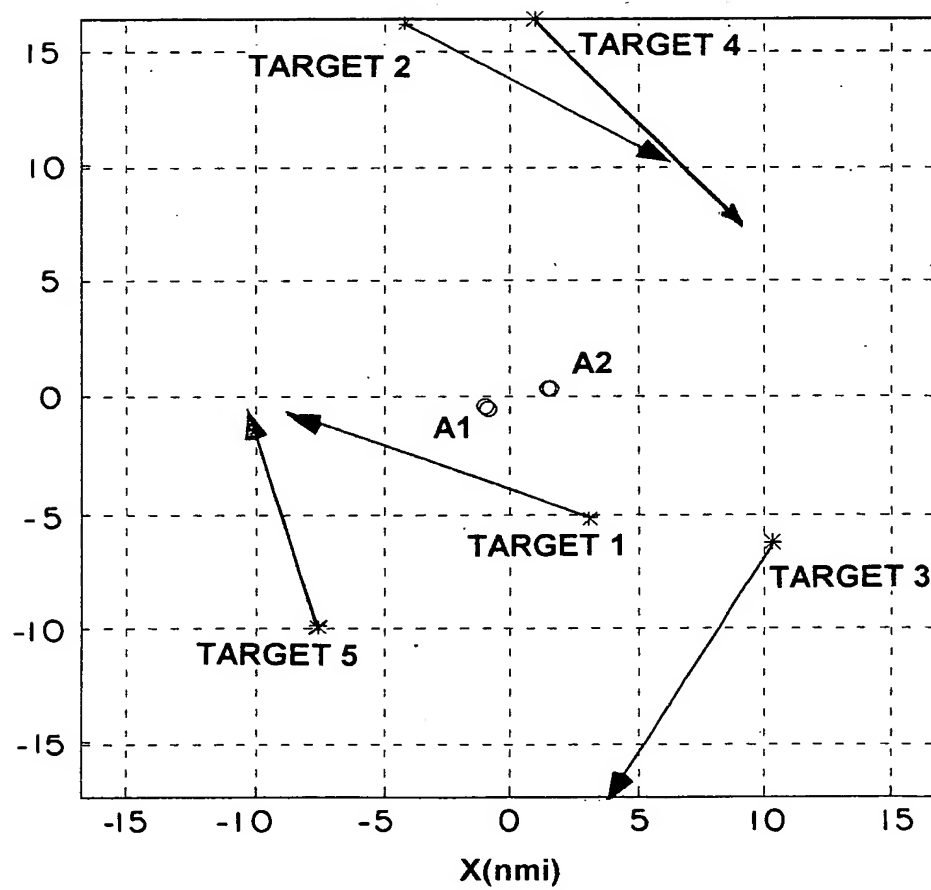
**FIG. 22f**



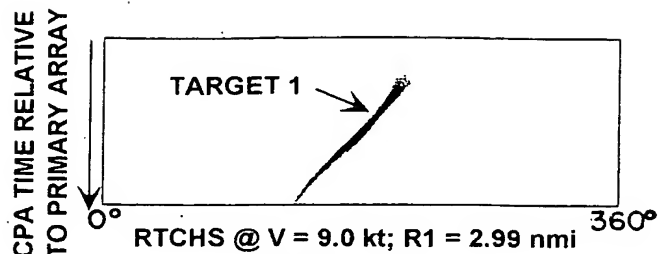
**FIG. 23a**



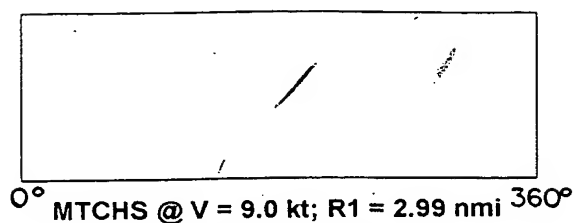
**FIG. 23b**



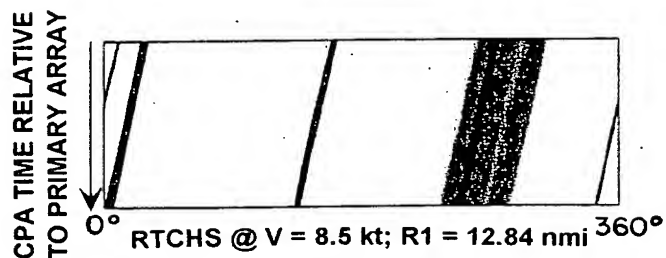
**FIG. 24**



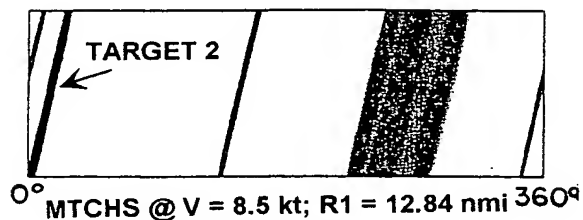
**FIG. 25a**



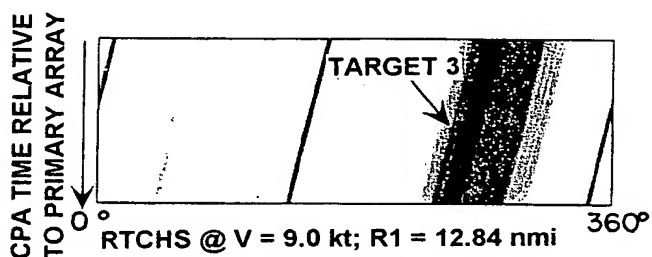
**FIG. 25b**



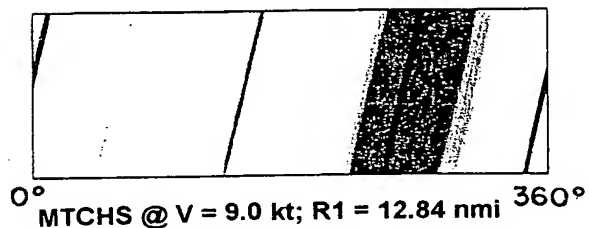
**FIG. 25c**



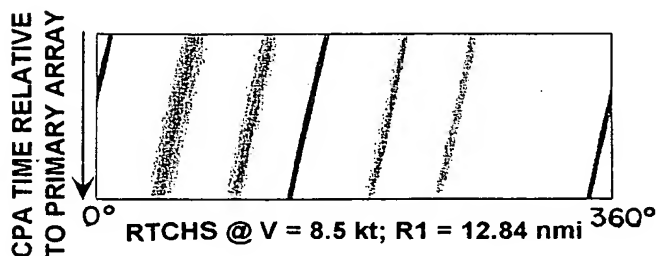
**FIG. 25d**



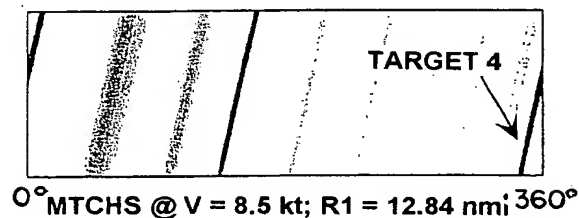
**FIG. 25e**



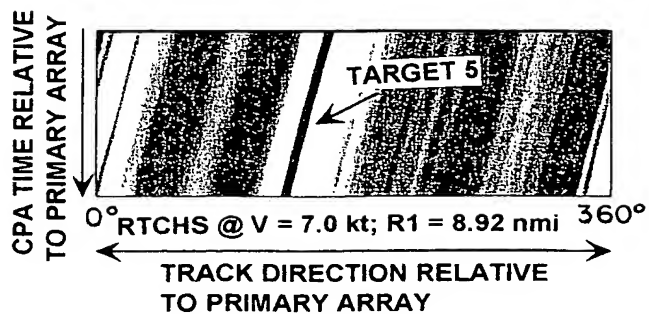
**FIG. 25f**



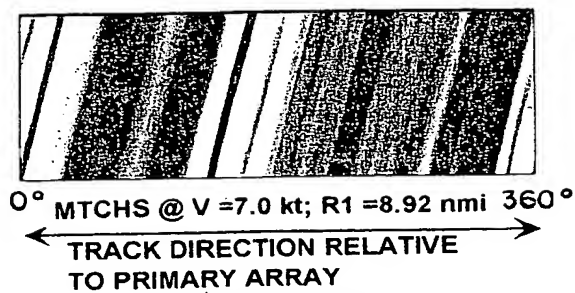
**FIG. 25g**



**FIG. 25h**

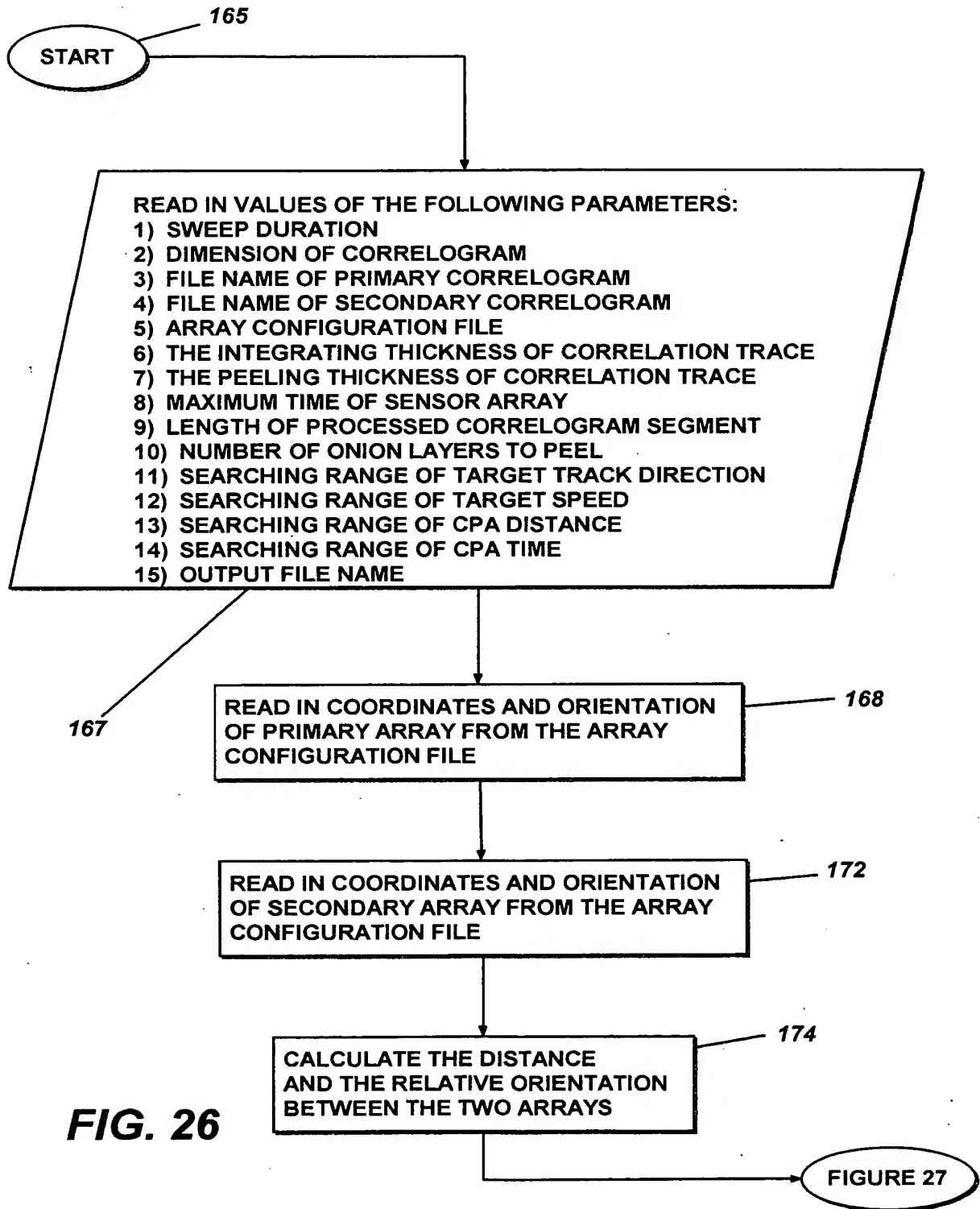


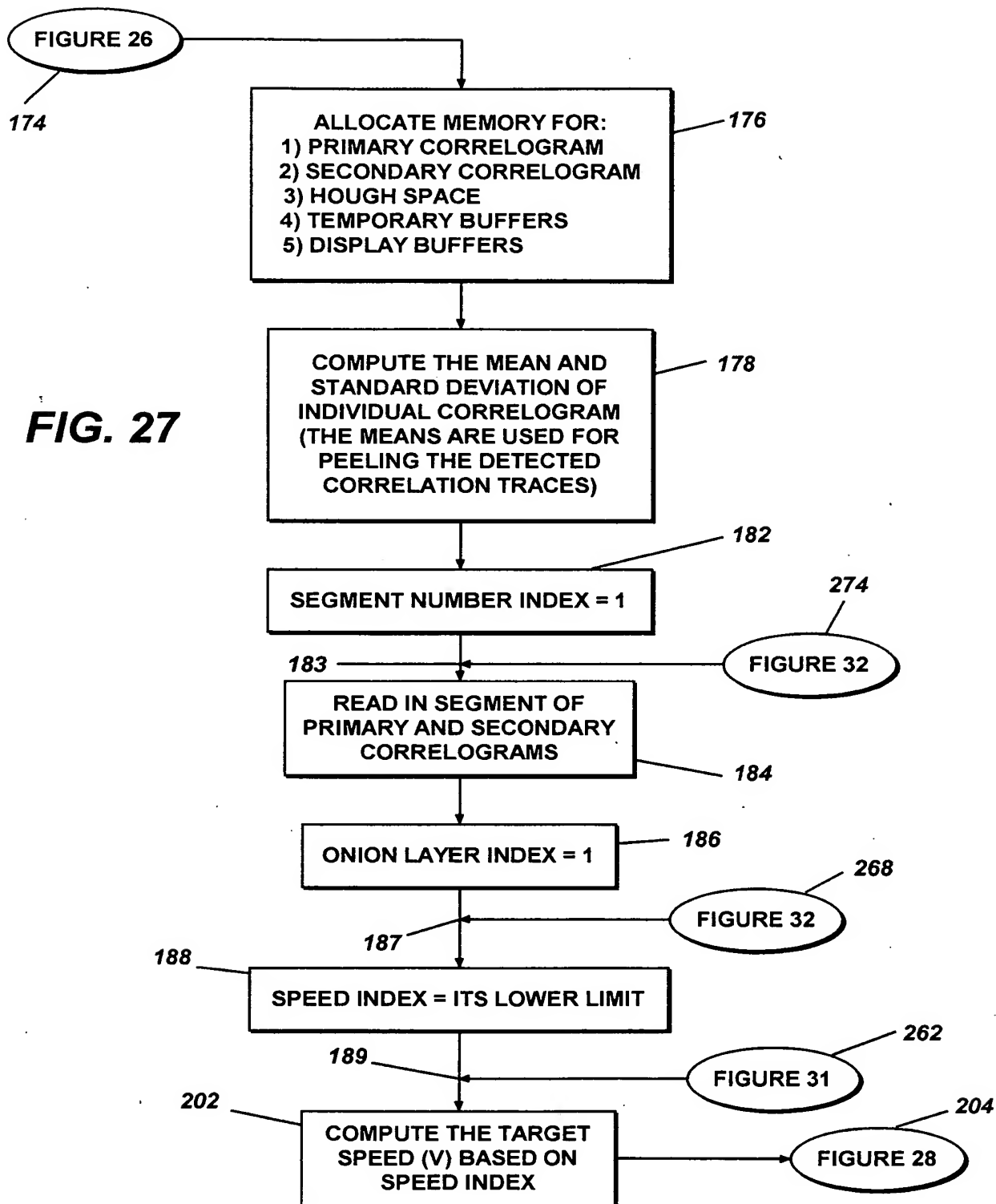
**FIG. 25i**



**FIG. 25j**

# THE BASIC FLOW CHART FOR THE ADDITIVE COMPOSITE HOUGH TRANSFORM





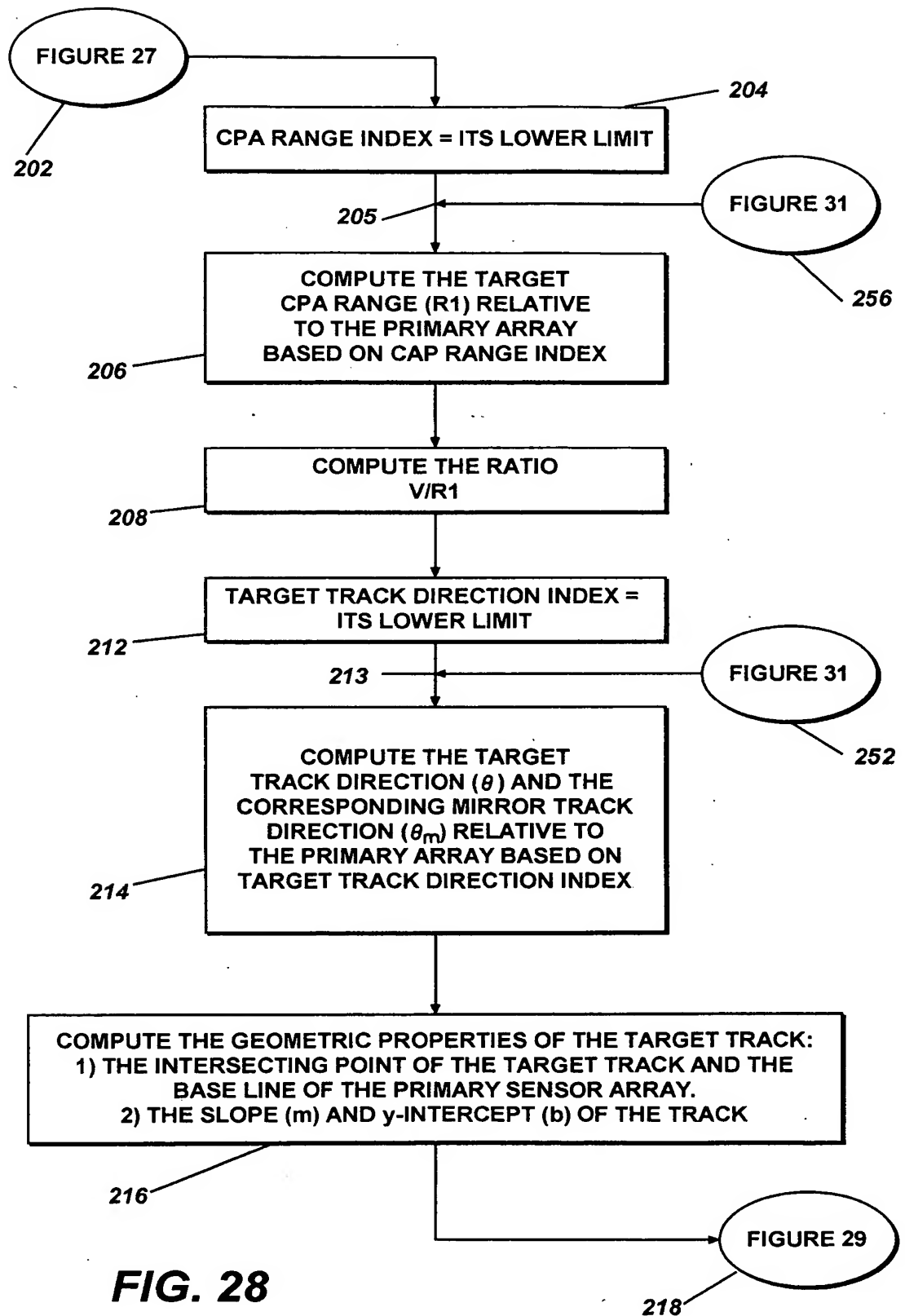


FIGURE 28

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USING THE GEOMETRIC CONSTRAINTS,  
COMPUTE THE FOLLOWING CORRESPONDING  
PARAMETERS FOR THE SAME TARGET RELATIVE  
TO SECONDARY ARRAY:

- 1) CPA RANGE ( $R_{2r}$ ) AND RATIO ( $V/R_{2r}$ )
- 2) CPA TIME OFFSET (for  $t_{02r}$ )
- 3) TARGET TRACK DIRECTION ( $\theta_{2r}$ )

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PERFORM THE SAME COMPUTATION FOR THE  
CORRESPONDING MIRROR TRACK: GET THE  
VALUES OF ( $R_{2m}$ ,  $V/R_{2m}$ ,  $t_{02m}$  OFFSET,  $\theta_{2m}$ )

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**FIG. 29**

CPA TIME (PRIMARY ARRAY) INDEX  
= LOWER LIMIT

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FIGURE 30

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COMPUTE THE CPA TIME ( $t_{01}$ ) BASED ON  
THE CPA TIME INDEX AND THE CPA TIME  
OFFSETS

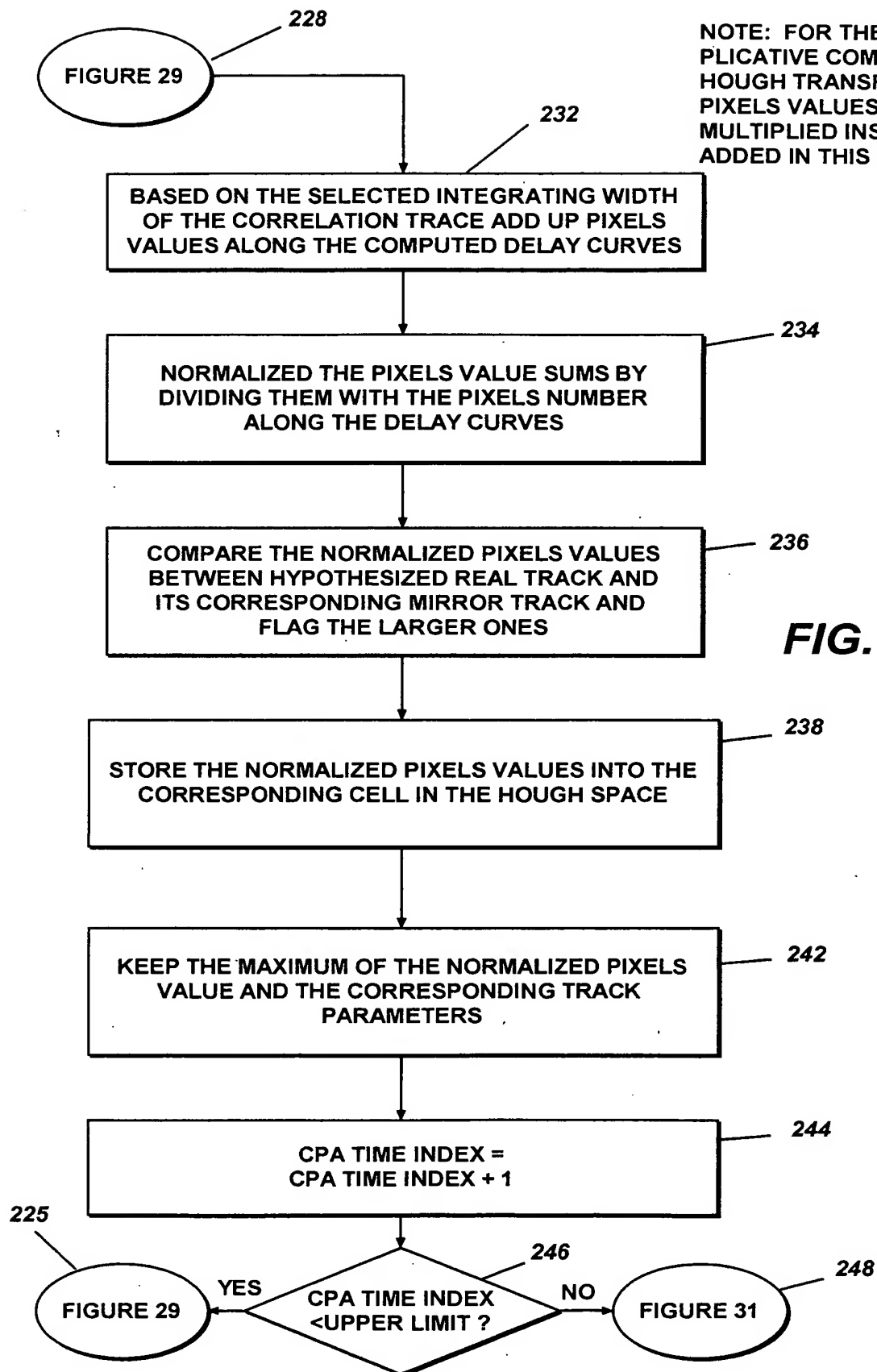
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BASED ON THE VALUES OF:  
1) CPA TIME ( $t_{01}$ ,  $t_{02r}$ ,  $t_{02m}$ )  
2) CPA RANGE ( $R_1$ ,  $R_2$ ,  $R_{2m}$ )  
3) SPEED ( $V$ )  
4) TRACK DIRECTION ( $\theta$ ,  $\theta_{2r}$ ,  $\theta_{2m}$ )  
5) MAX\_TAU  
COMPUTE THE DELAY CURVES: ONE IN  
THE PRIMARY AND TWO IN THE  
SECONDARY CORRELOGRAM

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FIGURE 30

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**FIG. 30**



